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## **REMARKS**

By this Reply, Applicant amends claims 1, 9, 12, 15, 18, 19, 23 and 24 and adds new claims 26-29. Claims 1-29 are therefore pending in this application, with claims 1, 9, 12, 15, 18, 19 and 23 being independent. Support for the amendments and new claims can be found throughout the disclosure, for example, at pages 5-12 and FIGS. 1, 3A and 3B. No new matter has been introduced.

In the Office Action of July 27, 2007 ("Office Action"), claims 1-6, 9-16 and 18-25 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 6,192,413 B1 ("Lee") in view of U.S. Patent No. 7,140,025 B1 ("Dillow"); and claims 7, 8 and 17 were rejected under 35 U.S.C. § 103(a) based on Lee in view of Dillow further in view of U.S. Patent No. 6,940,814 B1 ("Hoffman"). These rejections and the new claims are addressed below.

## Section 103 rejection of claims 1-6, 9-16 and 18-25

The section 103 rejection of claims 1-6, 9-16 and 18-25 should be withdrawn because *Lee* and *Dillow* do not support a *prima facie* conclusion of obviousness with respect to these claims, as currently presented.

Amended independent claim 1 recites a computer-readable medium comprising one or more code segments configured to:

receive an indication of an object type associated with a message independently of the message and the software applications, the object type including a category of enterprise application data; identify a message queue used for the object type; and perform a registration-related action on the identified message queue in response to the indication, the registration-related action affecting processing by middleware of messages stored in the identified queue and messages destined to the identified queue.

Lee and Dillow fail to disclose or suggest the combination recited in claim 1, including at least the "receive" feature noted above.

Lee relates to routing communications between computer processes. See Abstract; col. 2, lines 25-31. Lee does not disclose or suggest at least code to receive an indication of an object

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type associated with a message "independently of the message and the software applications, the object type including a category of enterprise application data," as recited in claim 1.

In *Lee*'s system, messages are routed to selected process queues. The process queue for a given message is obtained from a router table based on a message type designation, which is included in the message. *See* col. 2, lines 31-43. *Lee* discloses various message types, such as heartbeat messages, process messages, transfer data messages, telephony messages, event status messages, and telephony functions messages. *See* col. 6, lines 50-60; col. 7, lines 31-36. Receiving an indication of a message type (e.g., a data transfer message type), as disclosed in *Lee*, is not the same as receiving an indication of "a category of enterprise application data," as claimed. *Lee* discloses a "data" message type but does not disclose or suggest receiving an indication of a category of such data.

Even if *Lee*'s message type designation were considered an "object type," *Lee*'s message type designation is not received "independently of the message" and the software applications, as claimed. *Lee*'s system selects a queue for a message based on a type designation that is included in the message. *See* col. 6, lines 25-29. Indeed, the Office Action acknowledges *Lee*'s failure to disclose receiving an object type "independently of the message." *See* Office Action, p. 3.

Dillow fails to cure Lee's deficiencies. Dillow relates to maintaining real-time performance of calls in a communications system. See Abstract; col. 2, lines 2-5. Dillow does not disclose or suggest at least code to receive an indication of an object type associated with a message "independently of the message and the software applications, the object type including a category of enterprise application data," as recited in claim 1.

The Office Action cites to *Dillow*'s disclosure regarding service application registration. *See* Office Action, p. 3 (citing *Dillow*, 5:30-33). *Dillow* discloses that each service application (208, 210, 212) "registers with the TSCM [transaction server communications manager] server 220 as part of its initialization procedure." Col. 5, lines 29-31. According to *Dillow*, "the registration process determines the service type, and therefore, the service queue that the service application supports." This functionality in *Dillow* does not constitute or suggest code to receive an indication of an object type associated with a message "independently of the message and the software applications, the object type including a category of enterprise application data," as recited in claim 1.

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In particular, *Dillow* does not disclose receiving an indication of an object type, where the object type includes "<u>a category of enterprise application data</u>," as claimed. Instead, *Dillow* merely discloses "service" types, such as a 1-800 service, a virtual private network (VPN) service, and a calling card (CC) service. Col. 5, lines 43-48. A type of service provided by a telecommunications network carrier, as discloses by *Dillow*, does not constitute an object type associated with a message, where the object type includes "a category of enterprise application data," as claimed.

Moreover, *Dillow* does not disclose or suggest that the service type is identified "independently of the message and the software applications," as required by claim 1. Indeed, *Dillow* merely describes determining a service type supported by an application during an application registration process, which would presumably involve the application. *See* col. 5, lines 29-33. There is no indication that *Dillow*'s TSCM server 220 (or any other element in *Dillow*'s system) receives an indication of a service type supported by an application "independently" of the application.

For at least the foregoing reasons, *Lee* and *Dillow*—whether taken alone or in any combination—fail to disclose or suggest each and every feature of claim 1. Moreover, no basis has been established for "concluding that it would have been obvious to one of ordinary skill in the art to bridge the gap." M.P.E.P. § 2141(III), 8<sup>th</sup> Ed., Rev. 6 (September 2007). Indeed, the applied references do not provide such a basis. The section 103 rejection of claim 1 should accordingly be withdrawn.

Amended independent claims 9 and 12, although different in scope from claim 1 and each other, recite subject matter similar to that in claim 1 discussed above. The section 103 rejection of claims 9 and 12 based on *Lee* and *Dillow* should be withdrawn for at least reasons similar to those presented above in connection with claim 1. The section 103 rejection of claims 2-6, 10, 11, 13 and 14 should be withdrawn as well, at least because each of these claims depends upon one of claims 1, 9 and 12. Applicant accordingly requests withdrawal of the section 103 rejection and the timely allowance of claims 1-6 and 9-14.

Amended independent claim 15 recites a computer-readable medium comprising a generic module with one or more code segments configured to, *inter alia*:

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receive an indication of an object type associated with a message independently of the message and the software applications, the object type including a category of enterprise application data; [and]

initiate, based on stored associations between object types and function modules, a specific one of the function modules for identifying a message queue used for the indicated object type and returning a queue name of the message queue used for the indicated object type.

Lee and Dillow fail to disclose or suggest the combination recited in claim 15, including at least the "receive" and "initiate" features noted above.

For at least reasons similar to those presented above in connection with claim 1, *Lee* does not disclose or suggest code to receive an indication of an object type associated with a message independently of the message and the software applications, where the object type includes a category of enterprise application data, as recited in claim 15. Indeed, as explained above, *Lee*'s system merely selects a queue for a message based on a message type included in the message.

Moreover, *Lee* fails to disclose or suggest code to "initiate," as recited claim 15. In particular, *Lee* does not disclose or suggest code to initiate, <u>based on stored associations between object types and function modules</u>, a <u>specific one of the function modules</u> for identifying a message queue used for the indicated object type and returning a queue name of the message queue used for the indicated object type. Assuming for the sake of argument that *Lee*'s message type designation were considered an "object type," *Lee* does not disclose or suggest initiating a specific function module for identifying a queue for the message type based on stored associations between message type designations and function modules.

For example, *Lee* states that "in the example of FIG. 2A, since the message type is a transfer data (TD) message, the router table 44 of FIG. 3A indicates that it is the "U" queue identifier which is the selected destination for incoming message 54." Col. 6, lines 50-60. *Lee* does not disclose or suggest selecting a specific function module for identifying the destination queue based on a stored association between the "TD" message type and such a specific function module. *Lee* merely discloses that a "network communications program 40" uses the router table 44 to select a destination queue for the message. Col. 6, lines 20-35. *Lee* does not disclose or suggest any functionality to select a specific function module in the program 40 based on the

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particular message type (e.g., the "TD" type) included in the LAN message. Likewise, there is no indication in *Lee* of any functionality to select a specific program based on the particular message type. Indeed, *Lee*'s network communication program 40 is used regardless of the particular message type (e.g., TD, PM, TR, etc.) included in the LAN message.

Dillow fails to cure Lee's deficiencies with respect to claim 15. As explained above in connection with claim 1, Dillow does not disclose or suggest code to receive an indication of an object type associated with a message independently of the message and the software applications, where the object type includes a category of enterprise application data, as claimed. Dillow merely describes determining a service type supported by an application during an application registration process.

Dillow further fails to disclose or suggest code to initiate, based on stored associations between object types and function modules, a specific one of the function modules for identifying a message queue used for the indicated object type and returning a queue name of the message queue used for the indicated object type, as recited in claim 15. Even if Dillow's service type were considered an "object type," Dillow's system does not initiate a specific function module for identifying a queue for the service type based on stored associations between service types and function modules. For example, Dillow does not disclose or suggest selecting a specific function module for identifying a queue used for a 1-800 service type based on a stored association between the 1-800 service type and that specific function module. In Dillow's system, the particular service type (e.g., 1-800, VPN, CC) does not serve as a basis for initiating a particular function module for identifying and returning a name of a message queue.

Lee and Dillow—whether taken alone or in any combination—fail to disclose or suggest each and every feature of claim 15. Moreover, no basis has been established for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and Applicant's claim. See M.P.E.P. § 2141(III). Indeed, the applied references do not provide such a basis. For at least these reasons, the section 103 rejection of claim 15 should be withdrawn. The section 103 rejection of dependent claim 16 should likewise be withdrawn, for at least reasons similar to those presented above in connection with claim 15.

Amended independent claims 18 and 19, although different in scope from claim 15 and each other, recite subject matter similar to that in claim 15 discussed above. The section 103

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rejection of claims 18 and 19 based on *Lee* and *Dillow* should be withdrawn for at least reasons similar to those presented above in connection with claim 15. Applicant accordingly requests withdrawal of the section 103 rejection and the timely allowance of claims 15, 16, 18 and 19.

Amended independent claim 23 recites a combination including:

receiving an indication of a document type associated with a message independently of the message and the software applications; [and]

identifying inbound and outbound message queues used for the document type, the outbound message queue being located at the first system, the inbound message queue being located at the second system other than the first system, and the inbound message queue receiving messages from the outbound message queue.

Lee and Dillow fail to disclose or suggest the combination recited in claim 23, including at least the "receiving" and "identifying" features noted above.

Lee does not disclose or suggest receiving an indication of a document type associated with a message independently of the message and the applications, as recited in claim 23. Lee's system merely selects a queue for a message based on a message type included in the message.

Lee further fails to disclose or suggest identifying inbound and outbound message queues used for the document type, where (i) the outbound message queue is located at a first system, (ii) the inbound message queue is located at a second system other than the first system, and (iii) the inbound message queue receives messages from the outbound message queue. Lee's system selects a destination queue for a received LAN message based on a message type. See col. 6, lines 49-60. Lee does not disclose or suggest identifying an outbound queue from which the identified destination queue receives messages, where the outbound queue is located at a system other than the system at which the destination queue is located. Further, Lee does not disclose or suggest identifying inbound and outbound queues used for a document type, as claimed.

Dillow fails to cure Lee's deficiencies with respect to claim 23. Dillow does not disclose or suggest receiving an indication of a document type associated with a message independently of the message and the applications, as claimed. Dillow's service type (e.g., 1-800, VPN, CC) does not constitute a "document type," as claimed. Moreover, Dillow merely discloses

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identifying a service type during application registration and does not disclose receiving the service type independently of the application.

Dillow further fails to disclose or suggest the "identifying" feature of claim 23. In Dillow's system, a service queue supported by a service application (208, 210, 212) is determined during registration of the application with the TSCM server 220. Dillow does not disclose or suggest identifying inbound and outbound message queues used for a document type, where (i) the outbound message queue is located at a first system, (ii) the inbound message queue is located at a second system other than the first system, and (iii) the inbound message queue receives messages from the outbound message queue. In Dillow's system, each service queue relates to a different service type. See col. 4, lines 59-66. The reference does not disclose or suggest identifying an inbound and an outbound service queue that are both used for a particular document type. Additionally, Dillow does not disclose or suggest identifying an outbound service queue and an inbound service queue at different systems, where the inbound service queue receives messages from the outbound service queue. Dillow merely discloses a server placing messages on service queues (e.g., 240, 242) for retrieval by applications and the applications placing messages on a server queue or write queue (e.g., 244, 420) for an appropriate client server communications manager (CSCM). See col. 5, lines 27-63; col. 10, lines 15-40.

Lee and Dillow—whether taken alone or in any combination—fail to disclose or suggest each and every feature of claim 23. Moreover, no basis has been established for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and Applicant's claim. See M.P.E.P. § 2141(III). Indeed, the applied references do not provide such a basis. For at least these reasons, the section 103 rejection of claim 23 should be withdrawn. The section 103 rejection of dependent claims 24 and 25 should likewise be withdrawn, for at least reasons similar to those presented above in connection with claim 23.

# Section 103 rejection of claims 7, 8 and 17

Claims 7 and 8 depend upon claim 1, and claim 17 depends upon claim 15. As discussed above, *Lee* and *Dillow* fail to disclose or suggest each and every element in claims 1 and 15 and fail to provide a basis for concluding that the missing features would have been obvious.

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Hoffman, which was applied to claims 7, 8 and 17, relates to forwarding packets using multi-layer information. Col. 1, lines 9-15. Hoffman fails to cure the deficiencies of Lee and Dillow with respect to independent claims 1 and 15 and fails to provide a basis for concluding that the deficiencies would have been obvious. Accordingly, Lee, Dillow and Hoffman fail to support a case for prima facie obviousness with respect to claims 1 and 15 or their respective dependent claims 7, 8 and 17. Applicant therefore requests withdrawal of the section 103 rejection and the timely allowance of dependent claims 7, 8 and 17.

#### New claims 26-29

Each of new claims 26-29 depends upon claim 1 or claim 23 and is similarly not anticipated or rendered obvious by the applied art. Applicant submits that the applied art further fails to disclose or suggest at least some of the additional features recited in these new dependent claims. Applicant therefore request the timely allowance of new claims 26-29.

### Conclusion

Applicant requests the Examiner's reconsideration of the application in view of the foregoing and the timely allowance of pending claims 1-29.

It is believed that all pending issues in the outstanding Office Action have been addressed by this paper. The Office Action, however, contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action. In addition, there may be reasons for patentability of any or all pending or other claims that have not been expressed above.

If there are any questions regarding this paper or the application generally, Applicant would appreciate a telephone call to the undersigned since this may expedite prosecution of the application.

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The fee in the amount of \$1010.00 in payment of the RCE fee (\$810) and the excess claims fee (\$200) is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please grant any extensions of time required to enter this paper and apply any other required charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 29, 2007 /Frank A. Italiano/

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